

to determine what tasks were conducted by pharmacy staff and how much time was spent in the preparation of the top fifteen chemotherapeutic drugs and regimens used across the four sites. Pharmacy staff was observed as to the time spent in each task relative to the total time in an average shift to determine the proportion of total work hours dedicated to the preparation of the selected chemotherapy drugs. **RESULTS:** The total average fixed costs for the preparation of chemotherapy doses across all sites was \$36.03 (range \$32.08 for Virginia and \$67.19 for Utah). Data from the four centers was projected to the 3,990,495 million estimated chemotherapy infusions administered to a national Medicare population in 2003 resulting in a total annual cost to Medicare for chemotherapy preparation of \$143,777,535. Pharmacists were observed to spend the majority of their day (90% or higher) on tasks directly related to the preparation of these agents. **CONCLUSIONS:** Preparation costs for chemotherapy are significant and need to be considered in determining reimbursement rates for administration.

PCN29

PER-PATIENT COST OF HOSPITAL CARE FOR ADVANCED BREAST CANCER IN THE UK BASED ON A PATIENT-LEVEL RESOURCE UTILISATION DATASET

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OBJECTIVES: To estimate the per-patient cost of hospital care associated with the treatment of breast cancer recurrence in the UK. **METHODS:** Patient-level resource utilisation data for 571 node-positive early breast cancer patients treated at the Western general Hospital, Edinburgh between 1991 and 2004, of whom 180 experienced disease recurrence, were analysed in order to provide estimates of the cost of hospital care post-relapse. Unit costs from national sources were applied to patient-level resource use data for hospital care collected over a period of five years post-relapse. The total cost was estimated by bootstrapping (1000 simulations; with replacement). **RESULTS:** Of the 180 patients who experienced a relapse, 145 (81%) died within follow-up, 143 of these due to breast cancer. The first relapse was distant in 145 patients and locoregional in 35 (25 of which experienced a subsequent distant disease and 3 experienced further locoregional recurrence within follow-up). The bootstrap mean cost post-relapse (and 95% confidence intervals) was £14,085 (£12,370–£15,877) for patients whose first relapse was distant and £14,575 (£11,411–£17,872) for patients whose first relapse was locoregional. Comparison with previous published estimates suggests that the cost of chemotherapy treatments has increased substantially in recent years. **CONCLUSIONS:** Hospital costs for patients with relapsed breast cancer may be higher than previously estimated, perhaps due to recent increases in the costs of chemotherapy agents. Costs for patients whose first relapse is locoregional are similar on average to that for patients whose first relapse is distant, as many have subsequent locoregional or distant relapses.

PCN30

COMPARATIVE ANALYSIS OF DRUG COST OF BREAST, CERVICAL AND COLORECTAL CANCER IN HUNGARY

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OBJECTIVES: The aim of this study is to calculate the market share of drug cost from the total health insurance cost of treatment of breast, cervical and colorectal cancer. **DATA AND**

METHODS: Data derives from the central, nationwide database of the Hungarian National Health Insurance Fund Administration (OEP) covering the year 2001. The cost of treatment includes the cost of outpatient care, the acute and chronic inpatient care, the (subsidies) of medicines' prices (reimbursement) and the expenditure on disability to work. The subsidies of drugs include the following ATC codes: "L" (Antineoplastic and immunomodulating agents), "N02" (Analgesics) and "A04" (Antiemetics and antineuseants). The diseases were identified with the following ICD (International Classification of diseases): breast (C50, D05, D24), cervix (C53, D06, D26.0) colorectal (C18, C19, C20, C21, D01.0, D01.1, D01.2, D01.3, D01.4, D12). **RESULTS:** The total health insurance cost of treatment of breast cancer was around 33.4 million € (8.6 billion Hungarian forint) in 2001. The total health insurance cost of treatment of cervical cancer was around €4.1 million (1 billion Hungarian forint) in 2001. The total health insurance cost of treatment of colorectal cancer was around €38,871.666 (9.98 billion Hungarian forints) in 2001. The drug cost of breast cancer was €9.45 million, cervical cancer €0.62 million and colorectal cancer was €4.86 million. The market share of drug reimbursement cost from the total health insurance cost was the following: breast cancer (28.3%), cervical cancer (15.4%), colorectal cancer (12.5%). **CONCLUSIONS:** The health insurance reimbursement of drugs varies in different types of cancer. The drug costs represent the highest cost element in breast cancer compared to cervical and colorectal cancer.

PCN31

COST EFFECTIVENESS MODEL OF IV BISPHOSPHONATES IN THE PREVENTION OF BONE COMPLICATIONS IN BREAST CANCER PATIENTS WITH BONE METASTASES: A GERMAN INPATIENT PERSPECTIVE

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OBJECTIVES: Intravenous (IV) bisphosphonates reduce skeletal related events (SREs) and alleviate bone pain in patients with breast cancer and bone metastases (BCBM). However, these agents differ in terms of efficacy, administration time and costs. We compared the cost-effectiveness of IV bisphosphonates from a German inpatient perspective. **METHODS:** A 7-year literature-based model was designed to simulate the natural history, costs and quality-adjusted life expectancy (QALE) of 4 hypothetical cohorts of BCBM patients receiving no treatment (NT) or monthly IV ibandronate (IB), pamidronate (PA) or zoledronic acid (ZA). The model included probabilities of death and disease progression and the risk of SREs. The risk reduction in SREs with each bisphosphonate was estimated using the Andersen Gill hazard ratio v. NT (0.71 for IB, 0.70 for PA, and 0.56 for ZA). The model included direct medical costs for drugs, IV administration and SREs. Survival was adjusted for the time spent with and without SREs and on and off therapy to capture the bisphosphonates' impact on QALE. All outcomes were discounted at 5% per annum. **RESULTS:** The cumulative number of SREs over the 7-year simulation was lowest for ZA (3.53 per patient), followed by PA (4.17), IB (4.21) and NT (5.80). Average QALE was highest with ZA (1.10), followed by PA (1.09), IB (1.09) and NT (0.92). Total per-patient costs were lowest for ZA (€15,520), followed by PA (€16,968), NT (€17,317) and IB (€17,881). In probabilistic sensitivity analyses, the 95th percentile value for the cost per QALY saved was €15,600 (ZA), €84,000 (IB), and €87,500 (PA). ZA, PA and IB were cost savings